

ABSTRACT

ENCODER WITH REFERENCE MARKS

5 A scale (10) has magnetic incremental scale marks in a
track (10a), and a pseudo-random code sequence in a
reference mark track (10b). Sensors (2,3) feed the
pattern of the code in the track (10b) into a bi-
directional shift register (18). So that a user can
10 select any desired position for use as a reference
mark, a memory (24) is provided, into which any
selected code value can be pre-stored. A comparator
(26) then compares the code value in the shift register
(18) with the code value in the memory (24) and outputs
15 a reference mark signal (Ri) when they match.